AMENDMENTS TO THE CLAIMS WITH MARKINGS TO SHOW CHANGES

MADE, AND LISTING OF ALL CLAIMS WITH PROPER IDENTIFIERS

1.   (Currently amended) An automation system device[[,]] for a machine-tool, a

production machine or a robot, comprising:

   at least two components connected via a data link, and

   at least two sub-components associatable with a component,

   wherein a data message, which includes data for the components and

a plurality of data locations, can be sent between the at least two

components, and

   wherein the number of the data locations within a data message is

adjustable and each of the data locations is associatable with one of the

sub-components.

2.   (Original) The automation system of claim 1, wherein the data message is

subdivided into channels, with the data of a channel being associated with a

sub-component.

3.   (Original) The automation system of claim 1, wherein the data locations

have a standardized content.

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4.   (Original)   The automation system of claim 3, wherein the standardized content comprises at least one of an actual value, a setpoint, a control word and a parameter.

5.   (Currently amended)   The automation system of claim 1, wherein a sub-component includes an axis ~~or a transmitter~~.

6.   (Original)   The automation system of claim 1, wherein one component represents a master within the data link and at least one second component represents a slave within the data link.

7.   (Original)   The automation system of claim 1, wherein the data message has a programmable variable length or a maximum length, or both.

8.   (Original)   The automation system of claim 1, and further comprising a message selection table that includes messages selected from the group consisting of standard messages and user-defined messages.

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9. (Original)   A method for programming a data communication of an automation system, for a machine-tool, a production machine or a robot, the system including at least two components connected via a data link and exchanging a data message that includes data locations and data for a component, comprising:

adjusting the number of the data locations of the data message for those components that have at least two sub-components, and

associating each of the data locations with a respective one of the sub-components in one-to-one correspondence.

10. (Original)   The method of claim 9, and further including the step of subdividing the data message into channels using object separators, wherein the data message in a channel refers to a sub-component.

11. (Original)   The method of claim 9, wherein the data location includes a standardized content.

12. (Original)   The method of claim 11, wherein the standardized content comprises at least one of an actual value, a setpoint, a control word and a parameter.

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13. (Currently amended) The method of claim 9, wherein a sub-component is programmed to represent an axis, a transmitter, a cam connection, a terminal or another object.

14. (Original) The method of claim 9, wherein one component within the data communication is programmed as a master and at least one other component is programmed as a slave.

15. (Currently amended) A method for programming a data communication of an automation system, for a machine-tool, a production machine or a robot, the system including at least two components connected via a data link and exchanging a data message that includes data locations and data for a component, comprising the steps of:

   programming the automation system and the at least two components with an engineering system,

   associating two sub-components with at least one component, said at least one component or sub-component including a predefined function,

   automatically composing the data message, and

   automatically associating a data location with one of the sub-components when the data message is automatically composed,

   wherein the number of the data locations within a data message is adjustable.

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16. (Original) The method of claim 15, and further including the step of subdividing the data message into channels using object separators, wherein the data message in a channel refers to a sub-component.

17. (Original) The method of claim 15, wherein the data location includes a standardized content.

18. (Original) The method of claim 17, wherein the standardized content comprises at least one of an actual value, a setpoint, a control word and a parameter.

19. (Currently amended) The method of claim 15, wherein a sub-component is programmed to represent an axis, a transmitter, a cam connection, a terminal or another object.

20. (Original) The method of claim 15, wherein one component within the data communication is programmed as a master and at least one other component is programmed as a slave.

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21. (Original) An engineering system for programming a data communication in an automation system, the automation system including at least two components connected via a data link and exchanging a data message that includes data locations and data for a component, said programming including the steps of:

adjusting the number of the data locations of the data message for those components that have at least two sub-components, and

associating each of the data locations with a respective one of the sub-components in one-to-one correspondence.

22. (Currently amended) An engineering system for programming a data communication in an automation system, the automation system including at least two components connected via a data link and exchanging a data message that includes data locations and data for a component, said programming including the steps of:

associating two sub-components with at least one component, said at least one component or sub-component including a predefined function,

automatically composing the data message, and

automatically associating a data location with one of the sub-components when the data message is automatically composed,

wherein the number of the data locations within a data message is adjustable.

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